

IN THE CLAIMS:

Claims 1, 2, 5, 25, and 26 have been amended herein. All of the pending claims 1 through 29 are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

1. (Currently amended) A method for fabricating an interposer, comprising:
providing at least one interposer; and
fabricating at least one fence configured for placement on a surface of the at least one interposer,
the at least one fence including a receptacle configured to receive at least one
semiconductor device so as to align discrete conductive elements protruding therefrom
with corresponding contact pads at the surface of the at least one interposer, the
fabricating including:
at least partially, selectively consolidating unconsolidated material to form a first portion
of the at least one fence; and
repeating the at least partially, selectively consolidating at least once to form at least one
additional portion of the at least one fence.

2. (Currently amended) The method of claim 1, further comprising securing other
discrete conductive elements to other contact pads at an opposite surface of the at least one
interposer and in communication with the contact pads at the surface of the at least one
interposer.

3. (Previously presented) The method of claim 2, wherein securing other discrete
conductive elements comprises disposing solder bumps on the other contact pads.

4. (Previously presented) The method of claim 2, wherein securing other discrete
conductive elements comprises securing at least one of conductive balls, conductive bumps,
conductive pillars, and Z-axis adhesive film to the other contact pads.

5. (Currently amended) The method of claim 1, further comprising:
placing or forming a protective layer over at least a portion of at least one of a top surface and the surface and an opposite surface of the at least one interposer, with the contact pads of the at least one interposer being exposed through the protective layer.

6. (Previously presented) The method of claim 1, wherein fabricating the at least one fence includes disposing a portion of the at least one fence over at least one peripheral edge of the at least one interposer.

7. (Previously presented) The method of claim 1, wherein fabricating the at least one fence comprises fabricating at least one fence having a receptacle configured to progressively guide the at least one semiconductor device into alignment with the at least one interposer upon assembly of the at least one semiconductor device and the at least one interposer.

8. (Previously presented) The method of claim 1, wherein fabricating the at least one fence comprises fabricating the at least one fence on the surface of the at least one interposer.

9. (Previously presented) The method of claim 8, wherein fabricating the at least one fence comprises fabricating the at least one fence from a photopolymer.

10. (Previously presented) The method of claim 1, wherein fabricating comprises:
placing the at least one interposer in a first orientation;
determining an envelope defining limits of inner and outer surfaces of the at least one fence; and
forming at least a portion of the at least one fence as a series of superimposed, contiguous, mutually adhered layers of material commencing at a defined limit of the at least one fence.

11. (Previously presented) The method of claim 10, further comprising:
inverting the at least one interposer to a second orientation; and
forming additional portions of the at least one fence as a series of superimposed, contiguous,
mutually adhered layers of material.
12. (Previously presented) The method of claim 11, wherein forming additional
portions comprises adhering the additional portions to the at least one fence.
13. (Previously presented) The method of claim 1, wherein at least partially,
selectively consolidating is effected by directing a focused beam of radiation onto a surface of
selected regions of the unconsolidated material.
14. (Previously presented) The method of claim 8, wherein fabricating the at least
one fence comprises molding the at least one fence onto the at least one interposer.
15. (Previously presented) The method of claim 1, wherein the at least one fence
comprises at least one prefabricated fence and further comprising securing the at least one
prefabricated fence to the at least one interposer.
16. (Previously presented) The method of claim 1, wherein fabricating the at least
one fence comprises forming a plurality of superimposed, contiguous, mutually adhered layers
comprising at least partially consolidated material.
17. (Previously presented) The method of claim 1, wherein providing at least one
interposer comprises providing a substrate including a plurality of smaller interposers thereon.
18. (Previously presented) The method of claim 1, wherein providing at least one
interposer comprises providing a plurality of individual interposers.

19. (Previously presented) The method of claim 1, wherein providing at least one interposer comprises providing a single interposer.

20. (Previously presented) A method for fabricating an interposer, comprising:
providing at least one interposer; and
fabricating at least one fence configured for placement on a surface of the at least one interposer,
the at least one fence including a receptacle configured to receive at least one
semiconductor device so as to align discrete conductive elements protruding therefrom
with corresponding contact pads at the surface of the at least one interposer, fabricating
including:
placing the at least one interposer in a first orientation;
determining an envelope defining limits of inner and outer surfaces of the at least one
fence; and
forming at least a portion of the at least one fence as a series of superimposed,
contiguous, mutually adhered layers of material commencing at a defined limit of
the at least one fence.

21. (Previously presented) The method of claim 20, wherein fabricating further
comprises:
inverting the at least one interposer to a second orientation; and
forming additional portions of the at least one fence as a series of superimposed, contiguous,
mutually adhered layers of material.

22. (Previously presented) The method of claim 21, wherein forming additional
portions comprises adhering the additional portions to the at least one fence.

23. (Previously presented) The method of claim 20, wherein fabricating the at least one fence includes disposing a portion of the at least one fence over at least one peripheral edge of the at least one interposer.

24. (Previously presented) The method of claim 20, wherein fabricating the at least one fence comprises fabricating at least one fence having a receptacle configured to progressively guide the at least one semiconductor device into alignment with the at least one interposer upon assembly of the at least one semiconductor device and the at least one interposer.

25. (Currently amended) The method of claim 20, wherein ~~at least partially consolidating~~forming is effected by directing a focused beam of radiation onto a surface of selected regions of a layer.

26. (Currently amended) A method for fabricating an interposer, comprising:
providing at least one interposer; and
fabricating at least one fence configured for placement on a surface of the at least one interposer, the at least one fence including a receptacle configured to receive at least one semiconductor device so as to align discrete conductive elements protruding therefrom with corresponding contact pads at the surface of the at least one interposer, fabricating including:
directing a focused beam of radiation onto a surface of selected regions of unconsolidated material to at least partially consolidate material in the selected regions so as to form a first portion of the at least one fence; and
repeating ~~at least partially consolidating~~directing at least once to form at least one additional portion of the at least one fence.

27. (Previously presented) The method of claim 26, wherein fabricating the at least one fence includes disposing a portion of the at least one fence over at least one peripheral edge of the at least one interposer.

28. (Previously presented) The method of claim 26, wherein fabricating the at least one fence comprises fabricating at least one fence having a receptacle configured to progressively guide the at least one semiconductor device into alignment with the at least one interposer upon assembly of the at least one semiconductor device and the at least one interposer.

29. (Previously presented) The method of claim 26, wherein fabricating the at least one fence comprises forming a plurality of superimposed, contiguous, mutually adhered layers comprising at least partially consolidated material.